

# FLEXIBLE APPLICATOR FOR APPLYING OIL-IN-WATER EMULSION WITH IMPROVED STABILITY

## ABSTRACT OF THE DISCLOSURE

A flexible applicator for applying an oil-in-water emulsion comprises: (1) an allantoin-containing oil-in-water emulsion; and (2) a flexible element that adsorbs or absorbs the emulsion such that the emulsion is applied to the skin of a patient on whom the flexible applicator is placed. The allantoin-containing emulsion, containing allantoin and an emulsifier, has improved stability coming from the adjustment of the pH to a range of 3.0 to 6.0; preferably, the pH is in the range of 4.5 to about 5.8. The lower pH preserves the stability of the allantoin and the functionality of the emulsifier system is maintained. The emulsifier system can be a nonionic emulsifier or an anionic emulsifier plus beeswax. The acid used to adjust the pH can be an organic acid or an inorganic acid. The emulsion can further comprise other ingredients such as herbal extracts, chelating agents, preservatives, emollients, solvents, and fragrance. The flexible element can be in the form of a bandage or wipe, and can be formed of a material such as cotton, cellulose, nylon, rayon, a non-woven fabric, or a plastic polymer.